

Claims

What is claimed is:

- Sv a 1* 1. A flexible container comprising:  
 a plurality of panels joined together to form a sleeve, the panels each having an end edge  
 that cooperate to define an imaginary plane at one end of the sleeve; and  
 an end panel connected to the panels at the one end of the sleeve, the end panel having at  
 least one portion extending beyond the imaginary plane.
- sleeve* 2. The container of claim 1 wherein the panels form a polygonal sleeve.
- C 1* 3. The container of claim 1 wherein the panels each have a second end edge that  
 cooperate to define a second imaginary plane at another end of the sleeve, the container further  
 comprising a second end panel connected to the panels at the other end of the sleeve, the second  
 end panel having at least one portion extending beyond the second imaginary plane.
- Sv a 2 1* 4. The container of claim 1 wherein the portion extends outwardly from the sleeve.
- sleeve* 5. The container of claim 1 wherein the portion extends inwardly towards the  
 sleeve.
- C 1* 6. The container of claim 1 wherein the plurality of panels comprises four panels  
 cooperatively forming a sleeve having a generally rectangular cross-section.
7. The container of claim 6 wherein two opposing panels are gusseted panels.
8. The container of claim 7 wherein the gusseted panels have a gusset fold.
- 30 9. The container of claim 1 wherein the end panel is contiguous with the plurality  
 of panels.

10. The container of claim 1 wherein the end panel comprises a plurality of connecting members.

5 11. The container of claim 10 wherein the connecting members converge to a point.

12. The container of claim 10 wherein the connecting members converge to a line.

13. The container of claim 10 wherein the connecting members converge to a  
10 polygon.

14. The container of claim 1 wherein one of the panels has a port.

15. ~~The container of claim 14 wherein the port has a port closure connected thereto:~~

16. The container of claim 15 wherein the port closure comprises:  
a tube having a first end and a second end, the first end adapted to be connected to the port;

20 a plug inserted into the second end of the tube, the plug being made from a gas permeable porous material;

a cover having a first member and a second member, the second end of the tube being positioned between the members, the members being sealed together at their respective peripheral edges; and

an elastic band wrapped around the cover and tube.

25 17. A flexible container comprising:

~~a plurality of panels joined together to form a sleeve, the panels each having an end edge that cooperate to define an imaginary plane at one end of the sleeve; and~~

30 ~~an end panel connected to the panels at the one end of the sleeve, the end panel having a plurality of converging surfaces, the surfaces having at least one portion extending beyond the imaginary plane.~~

18. The container of claim 17 wherein the converging surfaces extend outwardly from the sleeve.

19. The container of claim 17 wherein the converging surfaces extend inwardly 5 towards the sleeve.

20. The container of claim 17 wherein the panels each have a second end edge that cooperate to define a second imaginary plane at another end of the sleeve, the container further comprising a second end panel connected to the panels at the other end of the sleeve, the second 10 end panel having a plurality of converging surfaces, the surfaces having at least one portion extending beyond the second imaginary plane.

21. A large volume flexible container capable of containing a fluid to be maintained under sterile conditions comprising:

15 a first panel, a second panel, a third panel, and a fourth panel connected together to form a generally cubic structure,  
the first panel having a central segment adjacent an end segment, the central segment having a longitudinal edge and the end segment having a tapered edge extending from the longitudinal edge, an angle being defined between the longitudinal edge and the tapered edge,  
20 the angle being in the range from about  $135.01^\circ$  to about  $138^\circ$ .

22. The container of claim 21 wherein the angle is in the range from about  $135.5^\circ$  to about  $136.5^\circ$ .

25 23. The container of claim 21 wherein the angle is  $136^\circ$ .

*add a<sup>5</sup> 7 add B 5*